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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,085	10/14/2003	Anthony J. O'Lenick JR.	COL-016	5506

7590
A.J. O'Lenick, Jr.
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08/17/2005

EXAMINER

WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,085

Applicant(s)

O'LENICK ET AL.

Examiner

Everett White

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Oct. 14, 2003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 1-5 are objected to because of the following informalities: In Claim 1, 2nd line from the last line; Claim 2, line 4; Claim 3, line 4; and Claim 4, line 4, the phrase "are R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰ and R¹¹ not all H" should be changed to - - R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰ and R¹¹ are not all H - -. In Claim 5, line 4, the phrase "are R¹, R², R³, and R⁴ not all H" should be changed to - - R¹, R², R³ and R⁴ are not all H - -. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 lacks consistence terminology throughout the claim. In Claim 4, it appears that the phrase "are R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰ and R¹¹ not all H" should be changed to - - R¹, R², R³ and R⁴ are not all H - - since the claims initial reference is directed to the R¹, R², R³ and R⁴ groups.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 2, 4, 6-8, and 12-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,800,741. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '741 patent claims an alkoxyated polyglycoside which comprises a mixture which contains compounds that conform to the structures disclosed in Claim 1 of the '741 patent wherein the R symbols in formulas (a) and (b) thereof represents alkyl having 8 to 22 carbon atoms; R¹ to R¹¹ are independently selected from the group consisting of

$-(\text{CH}_2\text{CH}_2\text{O})_x-(\text{CH}_2\text{CH}(\text{CH}_3)-\text{O})_y-(\text{CH}_2\text{CH}_2\text{O})_z-\text{H}$ and H; x, y and z are independently intergers ranging from 0 to 20, with the proviso that $x+y+z$ be at least 1 in both formulas and with the proviso that R¹ to R⁴ in formula (a) are not all H; and with the proviso that R⁵ to R¹¹ in formula (b) are not all H. Analogous formulas and conditions can also be set forth in the instantly claimed surfactant composition. The instantly claimed surfactant composition differ from the mixture of the '741 patent by claiming an additional group which may be represented by the R¹ to R¹¹ groups, which is not disclosed in the '741 patent. One having ordinary skill in the art would have been motivated to employ the process of the prior art with the expectation of obtaining the desired product because the skilled artisan would have expected the analogous starting materials to react similarly. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicant invention to replace the formulas set forth in the alkoxyated polyglycoside mixture of the '741 patent with formulas (a) and (b) of the instant claims in view of their closely related structures and the resulting expectation of similar surfactant properties.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

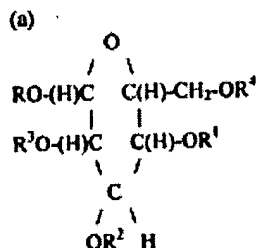
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

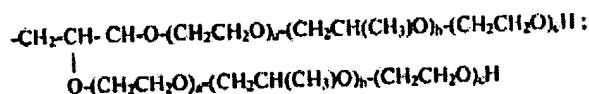
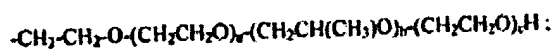
7. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizushima et al (JP Patent No. 03294288).

Applicants claim a surfactant composition, which comprises a mixture of compounds conforming to the following structures:



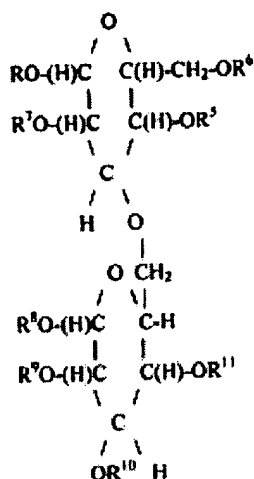
Wherein; R is alkyl having 8 to 22 carbon atoms; R¹, R², R³, and R⁴ are independently selected from the group consisting of:

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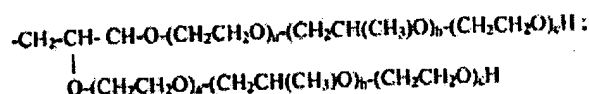
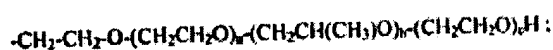


and H, with the proviso that $\text{R}^1, \text{R}^2, \text{R}^3$ and R^4 are not all H; wherein a, b and c are independently integers each ranging from 0 to 20; and

(b)



wherein: R is alkyl having 8 to 22 carbon atoms; $\text{R}^5, \text{R}^6, \text{R}^7, \text{R}^8, \text{R}^9, \text{R}^{10}$ and R^{11} are independently selected from the group consisting of:



and H, with the proviso that $\text{R}^5, \text{R}^6, \text{R}^7, \text{R}^8, \text{R}^9, \text{R}^{10}$ and R^{11} are not all H; a, b and c are independently integers each ranging from 0 to 20.

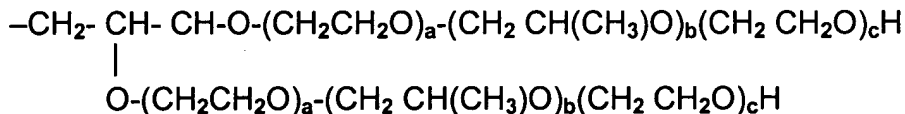
The Mizushima et al patent discloses preparation of 2,3-dihydroxypropylated alkyl glycosides as surfactants wherein the "HCAPLUS" abstract sets forth the formula $\text{A}(\text{Gm})[(\text{R}^{10})_x\text{B}]_y$ wherein G = C5 or C6-reducing sugar residue (sugar residue excluding both the Hs of the non-glycosidic OHs and those of the glycosidic OHs); m = condensation degree (1-10); A = $\text{R}^2(\text{OR}^3)_z$ linked with Gm in a glycosidic linkage; $\text{R}^2 =$

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C1-22 alkyl, alkenyl, alkynyl, alkylphenyl; R3 = C2-4 alkylene; z = 0-20; R1 = C2-4 alkylene, one end of which connects with a non-glycosidic O of the Gm residue and the other end forms an ether linkage with B; x = 0-10; y = number of non-glycosidic O of Gm; B = H, 2,3-dihydroxypropyl]. The formula in the Mizushima et al patent embraces formulas (a) and (b) of instant Claim 1 when A in the formula of the Mizushima et al patent is represented as C₈₋₂₂ alkyl group (i.e., A=R₂(OR₃)_z, z is zero, R₂= C₈₋₂₂ alkyl = A), when R1 = C₂ alkylene, x = 1, B is H, y = 4 and m = 1 for formula (a) of the instant claims. For formula (b) of the instant claims B is 2,3-dihydroxypropyl, x=0, y=7 and m = 2. This description of the formula in the Mizushima et al patent embraces the formulas (a) and (b) of instant Claim 1 when the formulas in instant Claim 1 are represented as follows: R is alkyl having 8 to 22 carbon atoms; R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰ and R¹¹ are represented by the formula



or



wherein a, b and c are zero.

The instant claims differ from the Mizushima et al patent by disclosing a surfactant composition comprising both structures of formulas (a) and (b). The Mizushima et al patent does not specify the presence of 2 different glycosides in the composition. However, it would have been *prima facie* obvious to one of ordinary skill in the art to combine two compositions each one of which is taught by prior art to be useful for the same purpose in order to form a third composition to be used for the same purpose, *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980). All the glycoside compounds that conform to the formula disclosed in the Mizushima et al patent are being used as surfactants, as instantly claimed. One having ordinary skill in the art would have been motivated to employ the process of the prior art with the expectation of obtaining the desired product because the skilled artisan would have expected the analogous starting materials to react similarly. Accordingly, it would have been obvious to one of ordinary

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skill in the art at the time of Applicant invention to replace the surfactants of the formula set forth in Mizushima et al patent with the compounds of structures having the formulas disclosed in the instant claims in view of their closely related structures and the resulting expectation of similar surfactant properties.

Summary

8. All the claims are rejected.

Examiner's Telephone Number, Fax Number, and Other Information


9. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at www.uspto.gov and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.


E.White


James O. Wilson
Supervisory Primary Examiner
Technology Center 1600